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EXAMINER	
HO, CHUONG T	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/608,997	RANGARAJAN ET AL.	
	Examiner	Art Unit	
	CHUONG T. HO	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10,12-18,20,22-24,26 and 28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,12-18,20,22-24,26 and 28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 June 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The amendment filed 07/17/06 have been entered and made of record.

2. Applicant's arguments with respect to claims 1-10, 12-18, 20, 22-24, 26, 28 have been considered but are moot in view of the new ground(s) of rejection.

3. Claims 1-10, 12-18, 20, 22-24, 26, 28 are pending.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 3-10, 12, 14, 17, 18, 20, 23, 24, 26, 28 are rejected under 35 U.S.C. 103(a) as being obvious over Putzolu et al. (U.S.Patent 6,868,086 B1) in view of Dobbins et al. (U.S.Patent No. 6,249,820 B1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the

application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

6. In the claim 1, Putzolu et al. discloses a first component (figure 1, forward element 25, forwarding element 25 attaches a data-layer header identifying the VLAN for the egress port and then retransmits the packet via port 18) configured to perform a route look-up to identify a proxy egress port by which a data packet is to leave the first component (see col. 3, lines 25-30, the control module 50 regularly transmits updated versions of the network-layer routing table to each forwarding element 24-27, which store the table in an internal storage device 52. From the routing table 48 and the network-layer packet destination, the forwarding elements 24-27 can determine the next-hop subnetworks A, B, C for received data packets);

To send an Address Resolution Protocol (ARP) request (see col. 4, lines 25-30, To determine the data-layer destination address of a packet, the forwarding element for a data packet's ingress port sends an address resolution protocol (ARP) request. The ARP packet is broadcasted over the VLAN appropriate to the data packet's next-hop subnetwork destination and received by the egress port connected to the next-hop subnetwork);

To label the data packet with information identifying the hardware address of the egress port (figure 2, col. 2, lines 57-58, forwarding element 25 attaches a data-layer header

identifying the VLAN for the egress port 15 and then retransmits the packet via the port 18) (see col. 3, lines 25-30, network – layer routing table);

A second component (figure 1, forwarding element 27) comprising the egress port (figure 1, 15); configured to receive the data packet (see col. 4, lines 30-32, the egress port removes the VLAN tag and broadcasts the ARP packet to the external subnetwork to which the port connects); and

An intermediate component (figure 1, forwarding element 26) bridging the first component (figure 1, forwarding element 25) and the second component (figure 1, forwarding element 27) to forward the data packet based on the hardware address of the egress port (see col. 2, lines 58-65, forwarding element 25 attaches a data-layer header identifying the VLAN for the egress port 15 and then retransmits the packet via port 18. Forwarding element 26 receives the packet and retransmits the packet only to the port 20 in response to reading the tag for the VLAN corresponding to the external port 15. Forwarding element 27 receives the packet and retransmits the packet only via the port 15 in response to reading the tag for the VLAN corresponding to the port 15) (see col. 3, lines 25-30, the control module 50 regularly transmits updated versions of the network-layer routing table to each forwarding element 24-27, which store the table in an internal storage device 52. From the routing table 48 and the network-layer packet destination, the forwarding elements 24-27 can determine the next-hop subnetworks A, B, C for received data packets).

However, Putzolu et al. is silent to disclosing to send an Address Resolution Protocol (ARP) request for a hardware address of an egress port by which the data

packet is to leave a networking router architecture to reach the receiver, to receive a response to the ARP request that includes the hardware address of the egress port.

Dobbins et al. disclose to send an Address Resolution Protocol (ARP) request for a hardware address of an egress port by which the data packet is to leave a networking router architecture to reach the receiver, to receive a response to the ARP request that includes the hardware address of the egress port (see col. 11, lines 20-22, ARP request are flooded out to each work group interface in the Interface table, in order to locate the physical address of the destination host) (see col.11, lines 57-60, the destination host 202, receiving an ARP Request for its physical address, responds with ARP Reply to the request source, i.e. the router 11. The router receives the Reply via interface-2 driver 204 forwards it to ARP-FAS-2 208, stores the physical address in the ARP Cache 212, and passes the interface number and physical address WG Cache 215).

Both Putzolu and Dobbins disclose ARP request. Dobbins recognizes to send an Address Resolution Protocol (ARP) request for a hardware address of an egress port by which the data packet is to leave a networking router architecture to reach the receiver, to receive a response to the ARP request that includes the hardware address of the egress port. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Putzolu with the teaching of Dobbins to send Address Resolution Protocol (ARP) request for a hardware address of an egress port by which the data packet is to leave a networking router architecture to reach the receiver, to receive a response to the ARP request that includes the hardware address

of the egress port in order to resolve interface number and physical address in the host table.

7. In the claim 3, Putzolu discloses the first component (figure 1, forwarding element 25) is configured to receive a packet from a first host (figure 1, subnetwork A) and the second component (figure 1, forwarding element 27) is configured to deliver the packet to a second host (see col. 2, lines 58-62).

8. In the claim 4, Putzolu discloses the routing table (see col. 3, lines 25-30, col. 4, lines 11-13, routing table) used to identify the egress port that leads to the second host (see col. 4, lines 11-13, the destination address).

9. In the claim 5, Putzolu discloses the first component (see col. 4, lines 25-30, the forwarding element for a data packet's ingress port sends an address resolution protocol (ARP) request. The ARP packet is broadcasted over the VLAN appropriate to the data packet's next-hop subnetwork destination and received by the egress port connected to the next-hop subnetwork) is configured to broadcast the ARP request; intermediate component (figure 1, forwarding element 26) is configured to forward the ARP request to the second component without a routing table look-up (see col. 2, lines 58-65); and the second component (see figure 1, forwarding element 27) is configured to receive the ARP request and to send the response (see col. 2, lines 58-65) (col. 4, lines 25-30).

However, Putzolu is silent to disclosing to receive the ARP request and to send the response that include the hardware address back to the first component.

Dobbins discloses additional intermediate components bridging the first component and the second component to forward the data (see col. 11, lines 20-22, ARP request are flooded out to each work group interface in the Interface table, in order to locate the physical address of the destination host) (see col.11, lines 57-60, the destination host 202, receiving an ARP Request for its physical address, responds with ARP Reply to the request source, i.e. the router 11. The router receives the Reply via interface-2 driver 204 forwards it to ARP-FAS-2 208, stores the physical address in the ARP Cache 212, and passes the interface number and physical address WG Cache 215).

Both Putzolu and Dobbins disclose ARP request. Dobbins recognizes receiving the ARP request and sending the response that include the hardware address back to the first component. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Putzolu with the teaching of Dobbins to receive the ARP request and send the response that include the hardware address back to the first component in order to resolve interface number and physical address in the host table.

10. In the claim 6, Putzolu discloses the first component (figure 1, col. 2, lines 57-65, forwarding element 25 attaches a data-layer header identifying the VLAN for the egress port 15 and then retransmits the packet via port 18) is configured to encapsulate the packet with the hardware address of the second component and to forward the encapsulated data packet through the intermediate component (figure 1, col. 2, lines 57-65, forwarding element 27) and forward the encapsulated data packet through the

intermediate component (figure 1, forwarding element 26) to the second component (figure 1, forwarding element 27).

11. In the claim 7, Putzolu discloses wherein the intermediate component (figure 1, col. 2, lines 57-65, forwarding element 26) acts as a transparent bridge to forward the ARP (see col. 4, lines 25-30, ARP) request and the encapsulated data packet.

12. In the claim 8, Putzolu discloses wherein the second component (figure 1, col. 2, lines 57-65, forwarding element 27) is configured to route the encapsulated data packet received through the intermediate component (figure 1, col. 2, lines 57-65, forwarding element 26) to a second host (figure 1, subnetwork C).

13. In the claim 9, Putzolu discloses wherein the first component (figure 1, col. 2, lines 57-65, forwarding element 25), the intermediate component (figure 1, col. 2, lines 57-65, forwarding element 26), and the second component (figure 1, col. 2, lines 57-65, the forwarding element 27) are connected through a network medium.

14. In the claim 10, Putzolu discloses wherein the network medium comprises Ethernet (see col. 2, lines 3-4).

15. In the claim 12, Putzolu discloses performing a lookup in a routing table (col. 3, lines 25-30) to determine a proxy egress port by which data is to leave a component (see col. 2, lines 16-18, lines 52-54);

Sending a request for an address of an egress component (see col. 4, lines 25-30) by which the data is to leave a networking router architecture to reach a receiver;

Labeling (col. 4, lines 57-65, col. 2, lines 57-65, attaches a data-layer header, col. 4, lines 18-22, attaching) the data with the address to identify the egress component;

Forwarding the data, based on the address, through an intermediate component (figure 1, col. 2, lines 57-65, forwarding element 26) to the egress component (figure 1, col. 2, lines 57-65, the forwarding element 27).

However, Putzolu is silent to disclosing receiving a reply to the request, the reply including the address of the egress component.

Dobbins et al. disclose receiving a reply to the request, the reply including the address of the egress component (see col. 11, lines 20-22, ARP request are flooded out to each work group interface in the Interface table, in order to locate the physical address of the destination host) (see col.11, lines 57-60, the destination host 202, receiving an ARP Request for its physical address, responds with ARP Reply to the request source, i.e. the router 11. The router receives the Reply via interface-2 driver 204 forwards it to ARP-FAS-2 208, stores the physical address in the ARP Cache 212, and passes the interface number and physical address WG Cache 215).

Both Putzolu and Dobbins disclose ARP request. Dobbins recognizes receiving a reply to the request, the reply including the address of the egress component. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Putzolu with the teaching of Dobbins to send Address Resolution Protocol (ARP) request for a hardware address of an egress port by which the data packet is to leave a networking router architecture to reach the receiver, to receive a response to the ARP request that includes the hardware address of the egress port in order to resolve interface number and physical address in the host table.

16. In the claim 14, Putzolu discloses broadcasting the request for the address of the egress component (see col. 4, lines 25-30) from the intermediate component (see col. 2, lines 57-65).

17. In the claim 17, Putzolu discloses routing the data packet from the egress component to the receiver (see figure 1, subnetwork C, col. 2, lines 57-65, col. 4, lines 18-22).

18. In the claim 18, Putzolu et al. discloses perform a look up in a routing table (figure 1, forward element 25, forwarding element 25 attaches a data-layer header identifying the VLAN for the egress port and then retransmits the packet via port 18) to determine a proxy egress port by which a data packet is to leave the one or more machines (see col. 3, lines 25-30, the control module 50 regularly transmits updated versions of the network-layer routing table to each forwarding element 24-27, which store the table in an internal storage device 52. From the routing table 48 and the network-layer packet destination, the forwarding elements 24-27 can determine the next-hop subnetworks A, B, C for received data packets);

send a request for a media access control (MAC) address of an egress component by the data is to leave a networking router architecture to reach a receiver (see col. 4, lines 25-30, To determine the data-layer destination address of a packet, the forwarding element for a data packet's ingress port sends an address resolution protocol (ARP) request. The ARP packet is broadcasted over the VLAN appropriate to the data packet's next-hop subnetwork destination and received by the egress port connected to the next-hop subnetwork);

To label the data with the MAC address of the egress port component (figure 2, col. 2, lines 57-58, forwarding element 25 attaches a data-layer header identifying the VLAN for the egress port 15 and then retransmits the packet via the port 18) (see col. 3, lines 25-30, network – layer routing table);

Forward the data, based on the MAC address, through an intermediate component (figure 1, forwarding element 26) to the egress component (figure 1, forwarding element 27) (see col. 2, lines 57-65, col. 4, lines 18-22, lines 30-32, the egress port removes the VLAN tag and broadcasts the ARP packet to the external subnetwork to which the port connects); and

However, Putzolu et al. is silent to disclosing receive a reply to the request, the reply including the MAC address of the egress component.

Dobbins et al. disclose receive a reply to the request, the reply including the MAC address of the egress component (see col. 11, lines 20-22, ARP request are flooded out to each work group interface in the Interface table, in order to locate the physical address of the destination host) (see col.11, lines 57-60, the destination host 202, receiving an ARP Request for its physical address, responds with ARP Reply to the request source, i.e. the router 11. The router receives the Reply via interface-2 driver 204 forwards it to ARP-FAS-2 208, stores the physical address in the ARP Cache 212, and passes the interface number and physical address WG Cache 215).

Both Putzolu and Dobbins disclose ARP request. Dobbins recognizes receive a reply to the request, the reply including the MAC address of the egress component. Thus, it would have been obvious to one of ordinary skill in the art at the time of the

invention to modify the system of Putzolu with the teaching of Dobbins to receive a reply to the request, the reply including the MAC address of the egress component in order to resolve interface number and physical address in the host table.

19. In the claim 20, Putzolu discloses receive the data in a packet from the sender (figure 1, forwarding element 25); and broadcast (see col. 4, lines 25-30) the request from the intermediate component (see col. 2, lines 57-65, col. 4, lines 25-30). However, Putzolu is silent to disclosing request for the MAC address of the egress component.

Dobbins discloses request for the MAC address of the egress component (see col. 11, lines 20-22, ARP request are flooded out to each work group interface in the Interface table, in order to locate the physical address of the destination host) (see col.11, lines 57-60, the destination host 202, receiving an ARP Request for its physical address, responds with ARP Reply to the request source, i.e. the router 11. The router receives the Reply via interface-2 driver 204 forwards it to ARP-FAS-2 208, stores the physical address in the ARP Cache 212, and passes the interface number and physical address WG Cache 215).

Both Putzolu and Dobbins disclose ARP request. Dobbins recognizes request for the MAC address of the egress component. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Putzolu with the teaching of Dobbins to provide request for the MAC address of the egress component in order to resolve interface number and physical address in the host table.

20. In the claim 23, Putzolu discloses route the packet from the egress component (figure 1, forwarding element 27) to the receiver (figure 1, subnetwork C).

21. In the claim 24, Putzolu discloses wherein the apparatus comprises a modularized network element that includes the first component (figure 1, forwarding element 25), the second component (figure 1, forwarding element 27), and the intermediate component (figure 1, forwarding element 26). The position of the components in the network element changing based on a path of the data (see col. 2, lines 57-65).

22. In the claim 26, Putzolu discloses performing the lookup (see col. 3, lines 20-25, the routing table) to determine the path comprises performing the lookup to determine the path in a modularized network element that includes the egress component (figure 1, forwarding element 27) and the intermediate component (figure 1, forwarding element 26), wherein the position of the component in the network changes based on the path (see col. 2, lines 57-65).

23. In the claim 28, Putzolu discloses performing the look up to determine the path in a modularized network element that includes the egress component (figure 1, forwarding element 27) and the intermediate component (figure 1, forwarding element 26), wherein the position of the components in the network element changes based on the path (see col. 2, lines 57-65).

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

25. Claims 15, 16, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Putzolu – Dobbins) in view of Mauger (U.S.Patent No. 6,522,627 B1).

In the claim 15, the combined system (Putzolu – Dobbins) disclose the forwarding the request for the address through the intermediate component (see Putzolu, figure 1, col. 2, lines 57-65, forwarding element 26) (col. 4, lines 25-30); sending the reply from the egress component to the intermediate component (see col. 4, lines 25-30, lines 35-42).

However, the combined system (Puzolu – Dobbins) are silent to disclosing forwarding the reply from the intermediate component without looking up the routing table to the component that send the request for the address.

Mauger discloses forwarding the reply from the intermediate component without looking up the routing table to the component that send the request for the address (see abstract, this provides end to end connectivity without the need for individual packet routing at the intermediate network node).

Both Putzolu, Dobbins, and Mauger discloses end to end connectivity. Mauger recognizes forwarding the reply from the intermediate component without looking up the routing table to the component that send the request for the address. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Putzolu – Dobbins) with the teaching of Mauger to reply

forwarding the reply from the intermediate component without looking up the routing table to the component that send the request for the address in order to improve the performance of switch architecture.

26. In the claim 16, the combined system (Putzolu – Dobbins) discloses the labeling the data with the address comprises encapsulating a data packet with a media access control (MAC) address of the egress component (see Putzolu, col. 2, lines 57-65, col. 4, lines 18-22, attaching).

However, the combined system (Putzolu – Dobbins) are silent to disclosing forwarding the data comprises forwarding the encapsulated data packet to the egress component through the intermediate component without a routing table look-up.

Mauger discloses forwarding the data comprises forwarding the encapsulated data packet to the egress component through the intermediate component without a routing table look-up (see figure 4, abstract, this provides end to end connectivity without the need for individual packet routing at the intermediate network node).

Both Putzolu, Dobbins, and Mauger discloses end to end connectivity. Mauger forwarding the encapsulated data packet to the egress component through the intermediate component without a routing table look-up. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Putzolu – Dobbins) with the teaching of Mauger to provide forwarding the encapsulated data packet to the egress component through the intermediate component without a routing table look-up in order to improve the performance of switch architecture.

27. In the claim 22, claim 22 is rejected the same reason of claim 16 above.

Claim Rejections - 35 USC § 103

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

29. Claims 2, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Putzolu – Dobbins) in view of Bragg (U.S.Patent No. 6,587,469 B1).

30. In the claim 2, the combined system (Putzolu – Dobbins) disclose the limitations of claim 1 above.

However, the combined system (Putzolu – Dobbins) is silent to disclosing additional intermediate components bridging the first component and the second component to forward the data.

Bragg discloses additional intermediate components (switch) bridging the first component (ingress port 21) and the second component (egress port 22) to forward the data (see figure 2, col. 3, lines 27-30, 41-45).

Both Putzolu, Dobbins, and Bragg disclose ingress ports and egress ports. Bragg recognizes additional intermediate components bridging the first component and the second component to forward the data. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Putzolu – Dobbins) with the teaching of Bragg to provide additional intermediate

components bridging the first component and the second component to forward the data in order to increase the performance of switch architecture.

31. In the claim 13, claim 13 is rejected the same reason of claim 2 above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T. HO whose telephone number is (571) 272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

08/08/06